Operational Risk Management Disclosure in Islamic Banks

Operational Risk Management Disclosure in Islamic Banks

Authors

- *Paolo Pietro BIancone, Full Professor, paolo.biancone@unito.it. - University of Torino*
- *Mohammad Ziad Shakhatreh, PhD Candidate, mohammad.shakatreh@unito.it. - University of Torino*
- *Maha Radwan, PhD Candidate, maha.radwan@unito.it. - University of Torino*

Islamic banks are vastly growing in a way that makes it highly important to have a unified risk management disclosure standards. This paper aims to explore the various kinds of risk that faces the Islamic financial institutions and in particular Islamic banks. The research focuses on studying deeply the operational risk since it represents one of the risks that is highly elevated in Islamic banks in comparison to their conventional counterparts. Unlike market and credit risk, the operational risk is difficult to evaluate and faces many issues like lack of standardization, measurement, and disclosure as well as the difference among the various regulatory rules in which will be discussed. Our objective is to find the best disclosure practices in financial annual reports and to develop unified operational risk disclosure framework in Islamic banks, where the full annual reports published by banks form the basis of our research. A content analysis is used to compare the disclosure of the operational risk among the different Islamic banks in different countries focusing on the banks that are adopting International Financial Reporting Standards "IFRS" and examining the disclosure quality for the selected sample of banks. Moreover a comparison for the different measurement approaches for calculating capital adequacy that are the basic indicator approach, the standardized approach, and the advanced measurement approach and which one of them is mostly used. We expect our paper to become a benchmark for Islamic banks for preparing their operational risk disclosure.

Keywords: Islamic Banking, Operational Risk, Disclosure, Risk Management, Financial Reporting.
JEL Classification: G21, G28, G32, M41, M48.

1 Introduction

Annual reports of banking institutions provide stakeholders with relevant financial, operational and strategic information. Hence disclosure of information is effective only if (a) it provides information about the risk of the firm and (b) it provides information about the risk management processes of the firm. Khan and Ahmed (2001). The lack of non-financial risk information may mislead investors in their investment decision-making process.

Islamic finance is a vast growing sector that has not taken root solely in Muslim countries but has also spread to non-Muslim countries. It is not serving only Muslims but also it started really to flourish as an ethical non risky attractive financial instrument for Non Muslims in Western countries.It is a system where all the financial transactions are conducted according to the principles of Sharia; which is the legislative framework that regulates all aspects of life for Muslims. These principles differentiate Islamic finance from the conventional finance, Biancone and Radwan (2015). The spread of Islamic finance into Western market demonstrates that it is now being viewed by investors, financial institutions and regulators as a viable alternative to conventional products, Biancone and Shakhatreh (2015).

Despite of the lower risk exposure of the Islamic financial institutions; due to its firm principles like asset based obligation and speculation prohibition; Islamic transactions and institutions nevertheless face unique risks that require a strong and comprehensive management process. The study focuses on one of the most major risk related to transactions which is the operational risk and in particular measuring the quality of its disclosure in the annual financial reports of the Islamic banks. Disclosing the truth is a very important issue in the Islamic context: it applies to businesses and to individuals, Napier (2007). The Quran emphasises the disclosure of truth: “And cover not Truth with falsehood, nor conceal the Truth when you know (what it is)” (Quran, surat al-baqarah 2:42).

Risk management of banks mainly covered market and credit risk whereas gives less concern of operational risk, and there is no formal reporting requirements for operational risk existed. We investigate the reporting of operational risk using a disclosure index, and we provide descriptive statistics to reveal how banks disclose information on operational risk. This allows us to draw conclusions about the development of the extent of disclosure on operational risk over the examined period.

The paper starts with an introduction and then literature review for the concept of risk management as well as an overview of risk management in Islamic banks and the different types of risks. Section 3 gives a deep analysis for operational risk in the Islamic banks. Section 4 sheds the light on the regulatory and capital adequacy requirements. Section 5 explores the operational risk disclosure in the different standards. Section 6 demonstrates the methodology used to measure the quality of the operational risk disclosure in Islamic banks and the developed disclosure index. Section 7 provides an analysis for the findings. Section 8 concludes the paper.

2 Literature review

Gallati(2003)defines risk as a condition in which there exists a possibility of deviation from a desired outcome that is expected or hoped for, or a condition in which there exists an exposure to adversity.

The ISO31000 (2009) defines risk as the effect of uncertainty on objective. This risk has to be managed, assessed and mitigated. And according to , Bessis and O'Kelly (2015) risk are broadly defined as uncertainties potentially resulting in adverse variations of profitability or in losses. Banking regulations, imposing capital charges against all risk, greatly helped the process of risk modelling because they imposed a quantification of several main risk of the bank.

Risk management process is a comprehensive system that includes creating an appropriate risk management environment, maintaining an efficient risk measurement, mitigating, and monitoring process, and establishing an adequate internal control arrangement, Ahmed and Khan (2007).

Risk management is One of the important parts of the decision making process. According to Kallman and Maric (2004) Risk management is a specialized discipline intended to provide decision makers with a scientific method to create the desired variation from an expected outcome at some time.

Risk management operations include risk identification, analysis, measurement, assessment and avoidance, and its objective is to mitigation and minimize of negative effects of the risks.

Risk management in Islamic banks can be defined as a process of management of the risk associated with a business, Islam is not against risk management, it is against the extremity on either side, i.e. not taking risk for fear of making loss only or taking excessive risk by indulging in gambling or speculation (maysir). What Islam promotes is the act of taking calculated risks with the expectation to make gains, Minhas (2014).

Risk management is a developing science throughout the financial services sector. The changing regulatory environment and expectations set challenges firms both in terms of the way they manage their business and also in the ways that they are governed. Islamic financial institutions have these prevailing concerns to contend with combined with more specific encumbrances, Dar and Azmi (2012).

Islamic risk management is different to conventional risk management in some specific areas. Clearly there is one major additional risk – the institution must remain Shari'a compliant, Dar and Azmi (2012).

According to Salem (2013) Islamic banks appear to be more complex as a result of the mix of financing tools replacing conventional loans, the complexity appears clearer when identifying the risk associated with each financing mode.

And according to Makiyan (2008) effective risk management in Islamic banks deserves special attention. However, it has many complex issues that need to be better understand. In particular, the nature of specific risks facing Islamic banks together with the virtually unlimited number of ways available to them to provide funds through the use of combinations of the permissible Islamic modes of financing – Profit Loss Sharing and non-Profit Loss Sharing – raise a host of issues in risk measurement, income recognition, adequacy of collateral and etc.

The techniques of risk identification and management available to the Islamic banks could be of two types. The first type comprises standard techniques, such as risk reporting, internal and external audit, internal rating and so on, which are consistent with the Islamic principles of finance. The second type consists of techniques that need to be developed or adapted, keeping in mind the requirements for shariah compliance. Hence the discussion of risk management techniques for Islamic banking is a challenging one, Ahmed and Khan (2007).

Islamic banks are constrained in using some of the risk mitigation instruments that their conventional counterparts use as these are not allowed under Islamic commercial law.

As Islamic banks use unique modes of finance, some risks need to be mitigated by proper documentation of products. Gharar (uncertainty of outcome caused by ambiguous conditions in contracts of deferred exchange) could be mild and unavoidable but could also be excessive and cause injustices, contract failures and defaults. Appropriate contractual agreements between counterparties work as risk control techniques, Ahmed and Khan (2007).

The Islamic Financial Services Board IFSB (2005) recognises six major types of risks: credit risk, equity investment risk, market risk, liquidity risk, rate of return risk, and operational risk

Credit risk is most important risk in the banking; it is the risk of counterparty defaulting on payment obligations, Bessis and O'Kelly (2015). Credit risk is generally defined as the potential that counterparty fails to meet its obligations in accordance with agreed terms.

According to Raghavan (2015) market risk is the risk to bank's earnings and capital due to change in the market level of interest rates or prices of securities, foreign exchange and equities, as well as the volatilities of those prices.

Market risk is defined as the risk of losses in on- and off-balance sheet positions arising from movements in market prices i.e. fluctuations in values in tradable, marketable or leasable assets (including Sukuk) and in off-balance sheet individual portfolios (for example restricted investment accounts), IFSB (2005).

Salem (2013) mentioned The component of market risk in Islamic bank are : mark up or benchmark risk, commodity price risk, foreign exchange (FX) risk and equity risk, where the first two are specific to Islamic finance, while the last two are identical to the FX risk and equity risk of conventional banks.

Equity investment risk is defined as the risk arising from entering into a partnership for the purpose of undertaking or participating in a particular financing or general business activity as described in the contract, and in which the provider of finance shares in the business risk, IFSB (2005).

This risk is somewhat unique to Islamic financial institutions, considering that conventional commercial banks do not invest in equity based assets. Equity investments can lead to volatility in the financial institution's earnings due to the liquidity, credit, and market risks associated with equity holdings. Although there is credit risk in equity-based assets, there is also considerable financial risk: capital may be lost due to business losses, Van Greuning and Iqbal (2008).

Liquidity risk is that risk where a financial institution will not be perceived as having sufficient cash, at one or more future periods in time, to meet such requirements, Matz and Neu (2006).

This risk is interpreted in numerous ways such as extreme liquidity, availability of liquid assets to meet liabilities, and the ability to raise funds at normal cost. This is a significant risk in Islamic Banks, owing to the limited availability of Shariah compatible money market instruments and Lender of Last Resort (LOLR) facilities, Sundararajan (2007).

According to Salem (2013) liquidity risk is referred, which is referred to as inability of liquidations assets to meet short- term obligation. There are two dimensions of liquidity risk: one that deals with the availability of liquid assets and other that focuses on the ability to raise liquid funds at a reasonable cost. The liquidity risk arising from both sources is critical for Islamic banks.

The rate-of-return risk stems from uncertainty in the returns earned by Islamic banks on their assets. This uncertainty can cause a divergence from the expectations that investment account holders have on the liabilities side. The larger the divergence, the bigger is the rate-of-return risk. Another way of looking at this is to consider the risk generally associated with overall balance sheet exposures, in which mismatches arise between the assets of the bank and the balances of the depositors, Van Greuning and Iqbal (2008).

(Basel Committee 2011) defined Operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputational risk. However, the Basel Committee recognizes that operational risk is a term that has a variety of meanings and therefore, for internal purposes, banks are permitted to adopt their own definitions of operational risk, provided the minimum elements in the Committee's definition are included.

Operational risk can be include legal risk relates to risks of unenforceability of financial contracts. This relates to statutes, legislation, and regulations that affect the fulfilment of contracts and transactions. This risk can be external in nature (like regulations affecting certain kind of business activities) or internal related to bank’s management or employees (like fraud, violations of laws and regulations, etc.),Khan and Ahmed (2001).

3 Operational Risk

Operational risk is inherent in all banking products, activities, processes and systems, and the effective management of operational risk has always been a fundamental element of a bank’s risk management programme. As a result, sound operational risk management is a reflection of the effectiveness of the board and senior management in administering its portfolio of products, activities, processes, and systems.

According to Crouhy et.al. (2001) people risk may arise due to incompetence and fraud, technology risk may result from telecommunications system and program failure. Process risk may occur due to various reasons including errors in model specifications, inaccurate transaction execution, and violating operational control limits. Due to problems arising from inaccurate processing, record keeping, system failures, compliance with regulations, etc., there is a possibility that operating costs might be different from what is expected affecting the net- income adversely, Khan and Ahmed (2001).

The Basel Committee on Bank Supervision (2001) has identified seven categories of operational risk associated with:

i. **Internal fraud**: an act of a type intended to defraud, misappropriate property or circumvent regulations, the law or company policy, excluding diversify/ discrimination events which involve at least one internal party.

ii. **External fraud:** an act of a type intended to defraud, misappropriate property or circumvent the law by a third party.

iii. **Employment practices and workplace safety**: an act inconsistent with employment, health or safety laws or agreements from payment of personal injury claims or from diversity/ discrimination events.

iv. **Client, products and business practices:** an unintentional or negligent failure to meet a professional obligation to specific client (including fiduciary and suitability requirement) or from the nature or design of a product.

v. **Damage to physical assets:** the loss or damage to physical assets from natural disaster or other events.

vi. **Business disruption and system failures:** disruption of business or system failures.

vii. **Execution, delivery and process management**: failed transaction processing or process management from relations with trade counterparties and vendors.

In operational risk identification analysis all major business disruptions that result in operational risk losses initiated from People, Systems and Technology, Policies, Processes and Delivery Failures, Transactions, and/or Internal and External Events should be considered, Akkizidis and Khandelwal(2008). Each operational risk is linked to specific Islamic contract, these contracts plays a pivotal role within the Islamic financial system.

Tabel 1 Types of operational risk in the different Islamic contracts.

Sources of operation	Types of operational risk	Islamic contract

al Risk		
Processes and delivery failures	Process execution: Delivery and process management, management failures, missing legal documentation, unapproved delivery failur.	Istisna Mudarabah Musharabah
People	Unauthorised usage of internal control, corporate governance, authorisation and approvals given to contracts that are not Shariah-compliant. Internal fraud: Intentional misreporting, employee theft , bribes,..etc. External fraud: Robbery, hacking, ..etc.	Murabaha Ijarah Musharakah
System	Internal Programming errors, loss of Information data, etc. External Utility outages such as power cut, telecommunication problems, ..etc.	Salam Istisna
Transaction and Policies	Business Transactions, Data entry errors, Document/ Contract error, Money laundering, producing and sale of unauthorised products that is against the Shariah principles.	Shariah law
External events	Power cut, telecommunication problem Political uncertainties, damage to physical assets, fires. Natural. Bankruptcy of supplier, transportation failures, ..etc.	Ijarah Mudarabah Musharakah

Source, Akkizidis and Khandelwa, (2008)

Operational risk is considered high on the list of risk exposures for Islamic banks. A survey conducted by, Khan and Ahmed (2001)shows that the managers of Islamic banks perceive operational risk as the most critical risk after markup risk. The survey finds that operational risk is lower in the fixed-income contracts of murabahah (cost-plus sales) and ijarah (leasing) and higher in the deferred sales contracts of salaam (agriculture) and istisna (manufacturing).

The greatest losses among all operational risks are the ones that are initiated from the employees' activities and the failures, inefficient, or inappropriate use of IT systems/technology. Financial institutions therefore should pay particular attention to these areas and be able to identify and manage such sources of operational risks, Akkizidis and Khandelwal (2008).

According to, Makiyan (2008) They are Several general factors currently make the operation of Islamic banks riskier and thus less profitable than traditional banks.:

• Underdeveloped or non-existent money markets. Thus, there is a need to establish a systemic liquidity - domestic and international - Islamic money market for Islamic financial institutions which should be compatible with the Sharia.

• Limited availability to access to lender of last resort (LOLR) facilities. This limitation is associated to the prohibition of discount rate. A practical approach to help and solve this issue should be developed for a wider availability of Islamic banks to a reliable money market.

• Legal uncertainties and limited market infrastructure which limit the availability of hedging instruments. The lack of legal framework can raise operational risk and undermine market development. For instance, the question on whether derivatives or future contracts can be utilized to reduce risk of Islamic financial transactions, the answer is still being debated. In this regard, uniformity on religious principles is also an important issue which should be concerned.

Operational risk may arise from various sources: a) The unique activities that Islamic banks must perform. b) The non-standardized nature of some Islamic products. c) The lack of an efficient and reliable Sharia legislation system to enforce financial contracts. Makiyan (2008).

Van Greuning and Iqbal (2008) added to the reasons in which could raise the operational risk in Islamic banks

- Cancellation risks in the nonbinding murabahah (partnership) and istisna (manufacturing) contracts;
- Failure to comply with *Sharia* requirements;

Sharia risk is related to the structure and functioning of Sharia boards at the institutional and systemic level. This risk could be of two types; the first is due to nonstandard practices in respect of different contracts in different jurisdictions, and the second is due to the failure to comply with Sharia rules. Differences in the interpretation of Sharia rules result in differences in financial reporting, auditing, and accounting treatment, Van Greuning and Iqbal (2008).

Sharia non-compliance is an additional risk specific to Islamic Financial institution (IFLs). It can impact the overall reputation of the IFI, and if managed poorly can result in the loss of customers, business, and result in regulatory actions. Sharia non-compliance risk exists in all types of Islamic financial products and there is a reputational risk involved if products do not adhere to the shariah, Minhas (2014).

4 Regulatory and capital adequacy requirement

At the regulatory level, Islamic Financial Services Board (IFSB) has issued "Guiding Principles of Risk Management" that provides guidelines of risk management for institutions offering Islamic financial services. These principles complement the Basel II guidelines of managing various risks by catering to the specific risks arising from Islamic contracts. The first principle of the IFSB guidelines of risk management is a general requirement that indicates that each Islamic financial institution should have "a comprehensive risk management and reporting process including appropriate board and senior management oversight, to identify, measure, monitor, and control relevant categories of risks and, where appropriate, to hold adequate capital against these risks, Ahmed and Khan (2007).

Some of International Financial Reporting Standards are not applicable to Islamic banks, and issues arise in Islamic finance for which no IFRS exist. In 1990 the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) was created to address this issue and create an adequate level of transparency in the financial reporting of Islamic banks. Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) is an independent industry body dedicated to the development of international standards applicable for Islamic financial institutions. AAOIFI has made a number of important contributions, including the issuance of accounting and auditing standards, Van Greuning and Iqbal (2008), AAOIFI was established in order to provide financial instrument on Islamic worldwide and sharia (Islamic law) requirements. AAOIFI focuses on Islamic institution, but has neither been fully adopted nor been obligatory yet.

According to Sundararajan (2007), The disclosure practices of Islamic Banks are highly varied, and Supervisor's authority to impose disclosure norms is also highly varied. Nevertheless, the AAOIFI Financial Accounting Standards (FAS) – in particular FAS No. 1, which establishes the content of financial statements to be published – provide a sound basis for further developing prudential disclosures. Such further development should have two key purposes:

- Develop consumer-friendly disclosures to inform investment account holders on the inherent overall risks that they face, and the related reserving policies.
- Develop market-oriented disclosures to inform public at large, particularly other professional counterparties, including regulators (who will require more details, not publicly disclosed) on capital, risk exposures and capital adequacy, along the lines of Pillar III of Based II.

Capital adequacy is an important benchmark for the soundness of the financial institutions and it is at the core of the supervisory activities all over the world. The Basel Committee on Banking Supervision has proposed a separate capital requirement for credit and operational risks, believing that operational risks are sufficiently important for banks to devote resources to quantify such risks and to incorporate them separately into their assessment of their capital adequacy, Izhar (2010).

Unlike Basel I, has focused on credit risk, Basel II includes an explicit measure for operational risk. This new capital accord requires all banks to hold adequate capital against potential operational losses. According to the New Basel Capital Accord (Basel II) for assessing capital adequacy for operational risk, there exists three possible capital calculation approaches for the treatment of operational risk under Pillar 1 of Basel II: Basic Indicator Approach (BIA), Standardized Approach (SA), and Advanced Measurement Approach (AMA).The use of these approaches depends on the sophistication of the bank, Abdullah et al. (2011).

The simplest way is the Basic Indicator Approach (BIA), by which the capital charge is calculated as a percentage (alpha) of Gross Income (GI), a proxy for operational risk exposure. Being the most basic approach, its adoption does not require prior supervisory approval. The most advanced methodology is the advanced measurement approaches (AMA), which allows banks to use internal models to calculate their capital requirements. Adoption of the AMA requires prior supervisory approval and involves implementation of a rigorous risk management framework, Committee Basel (2014).

On the other hand the Islamic Financial Services Board (IFSB), it proposed measurement of capital to cater for operational risk in Islamic Financial Services (IIFS) may be based on two approaches, which are in a continuum of increasing sophistication and risk sensitivity: the Basic Indicator Approach and the Standardized Approach. Under the BIA, a fixed percentage of 15% of annual average gross income, averaged over the previous three years, is set side. Under the STA, this percentage varies according to the business lines from 12% to 18%

As starting point for capital calculation, IIFS adopting the BIA are required to adopt international best practices on the management of operational risk. However, to adopt SA, an IIFS will be required to satisfy the supervisory authority that it has achieved sound implementation of operational risk and Sharia non-compliance risk management framework and processes, and has adhered to the business line mapping principles. Supervisory authorities may specify detailed qualifying criteria for SA. IIFS that adopt standardized approaches will not be allowed to revert to the simpler approach (BIA) without the prior approval of their supervisory authority. However, supervisory authorities, at their discretion, may require an IIFS to use a simpler approach for some or all of the operations in case they are not satisfied with an IIFS as regards meeting the criteria for a more sophisticated approach. Afterwards, the IIFS shall not be allowed to revert to the more advanced approach without the prior approval of their supervisory authority, IFSB (2013).

5 Operational Risk Disclosure

Financial disclosure aiming at enhancing transparency and market discipline are presented. Disclosure requirements related to financial statements have traditionally been a pillar of sound regulation. Disclosure is an effective mechanism for exposing banks to market discipline and presenting quality data, enabling reasonable financial risk analysis , Van Greuning and Iqbal (2008).

If shareholders and other interested parties are to be able to understand the risk profile of the firm, they need to receive information about the risks firm faces and how the directors are managing those risks. It is argued that, at present, limited risk disclosure occurs therefore firms are not fully transparent this respect, M. Linsley and J. Shrives (2005).

Accounting standards setters encourage incentives for improved risk management and its disclosure. Both International Accounting Standards (IAS) and the Statements of Financial Accounting Standards (FASB Statements) contain extensive standards on the treatment of credit risk (IAS 30; FASB Statements 5, 15, 114, and 118), while disclosure on operational risk is not explicitly regulated today, Helbok and Wagner (2006).

In general, the quality of operational risk disclosure is fully compliant, pointing to either a specific section for operational risk in their annual reports or individually developed templates under the existing Basel Framework's Pillar 3 disclosure requirements. However, the BCBS pointed out that these disclosures do not contain sensitive information relating to control gaps or issues, which suggests that they tend to be primarily high-level statements. The Basel Committee surmised that the relative lack of information on the banks' operational risk profile and operational risk management processes may be attributable to inadequate implementation of a disclosure policy that is subject to approval and oversight by the banks' board, KPMG LLP (2014).

Moreover, Sundararajan (2007) has mentioned that operational risks are likely to be significant in Islamic Banks due to specific contractual features and the general legal environment. Specific aspects that could raise operational risks in Islamic banks include the following: (1) The cancellation risks in non-binding murabahah and istisna contracts, (2) problems in internal control systems to detect and manage potential problems in operational processes and back office functions, (3) technical risks of various sorts, (4) the potential difficulties in enforcing Islamic Finance contracts in a broader legal environment, (5) the risk of non-compliance with Shariah requirements that may impact on permissible income, (6) the need to maintain and manage commodity inventories often in illiquid markets, and (7) the potential costs and risks in monitoring equity type contracts and the associated legal risks.

In 2007 the IFSB issued standards called "Disclosures to promote transparency and market discipline for institutions offering Islamic financial services" The purpose of this Standard is to specify a set of key principles and practices to be followed by institutions offering Islamic financial services (IIFS) in making disclosures, with a view to achieving transparency and promoting market discipline in regard to these institutions. The objectives of this Standard are: (a) to enable market participants to complement and support, through their actions in the market, the implementation of the Islamic Financial Services Board's (IFSB) capital adequacy, risk management, supervisory review and corporate governance standards; and (b) to facilitate access to relevant, reliable and timely information by market participants generally, and by investment account holders (IAH) in particular, thereby enhancing their monitoring capacity, IFSB (2007).

With regard to operational risk disclosure An IIFS shall make disclosures regarding its systems and controls, including those for Shariah compliance, and the mechanisms it has in place to safeguard the interests of all fund providers. Furthermore the qualitative disclosure includes Policies to incorporate operational risk measures into the management framework – for example, budgeting, target-setting, and performance review and compliance. Policies on processes; (a) to help track loss events and potential exposures; (b) to report these losses, indicators and scenarios on a regular basis; (c) to review the reports jointly by risk and line managers; and (d) to ensure Shariah compliance. and Policies on the loss mitigation process via contingency planning, business continuity planning, staff training and enhancement of internal controls, as well as business processes and infrastructures, IFSB (2007).

6 Research methodology

The research used secondary data from the full annual reports of Islamic banks worldwide. The list of the sample banks were derived from Bankscope (world banking information source). The annual reports have been obtained from the banks' websites. The examined sample was filtered to focus on Islamic banks that are using the IFRS accounting standards and the year of examination is 2014.

As the research focuses on the quality of the operational risk disclosure, we have developed a list of best practices disclosure with reference to the AAOIFI, Basel accord, IFSB risk guidelines , IFRS, and the annual report of these banks as the practitioner of disclosure. We have implemented a disclosure index using the content analysis since it is a valid way to describe and make inferences about the characteristics of banks annual reports content and comparing it to the above mentioned standards. The unit of the analysis used are words and sentences for examining the qualitative disclosure while the index is reflecting a checklist of disclosed items in our sample banks in which we can measure the disclosure level.We expect to observe some difference in terms of disclosure from those of the conventional banks, since Islamic banks have a unique risk profile because of the need to have their products Shariah compliant.

The Operational risk disclosure index includes (16) items, which are covering the following qualitative disclosure consist of: Definition, Key procedures to manage operational risk, responsibility, structure, policies, Functions of audit committee and risk committee, Compliance with regulatory, contingency and continuity plans, fraud, ethical and business standards, Training and professional development, capital adequacy measurement, and Requirement for: independent, monitoring, periodic assessment, reporting of operational losses and Risk mitigation. In terms of quantitative disclosure the index include the measurement approach of capital adequacy.

We have used the unweighted method in constructing the disclosure index where the items scores one if it is disclosed and scores zero if it is not disclosed. The disclosure index is calculated as follows:

$$ORDI_N = \sum X_{in} / \sum Y_{in}$$

Where,

$ORDI_N$ = Operational Risk Disclosure Index for bank N

$\sum X_{in}$ = disclosed items by bank N

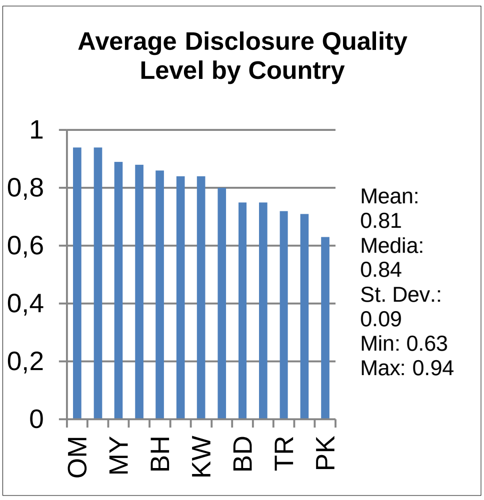
$\sum Y_{in}$ = full items expected to be disclosed by bank N

7 Research findings:

Using the Bankscope databank to reach our sample where we have set a filter to have all Islamic banks worldwide that are using IFRS accounting standards and setting the annual report of 2014 as the measurement year that we examined the 16 items of the developed disclosure index. The annual reports were all acquired from the banks websites. The sample was concluded as follows: total of available Islamic banks on the database is 191 that was reduced to 99 after imposting IFRS as an accounting standard and finally arrived to 74 after applying the investigation year 2014.

The set of the 74 banks was reduced to be 55 banks; and this was either unavailable published information in the banks websites or unavailability of the English language reports. The 55 banks that compose our sample are distributed among 13 country as follows: Emirates, Bangladesh, Bahrain, United Kingdom, Kuwait, Maldives, Malaysia, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia, and Turkey. The average total level of quality of the disclosure index by country was ranging from 63% up to 94% and can be seen in figure(1). Where Oman and Qatar have the highest level while Pakistan has got the lowest level.

As for the total level of quality of the disclosure index over the whole sample by every individual bank regardless of the country was ranging from 50% up to 100% of the disclosure index items as demonstrated in figure (2) where only 6 banks out of 55 have disclosed 100% of the items which is equivelant to almost 10% of the total sample banks.



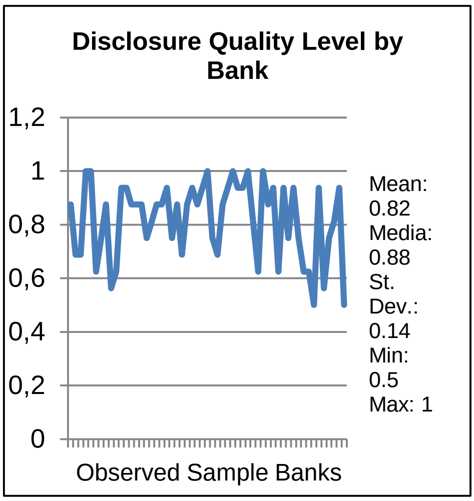


Figure 1 **Figure 2**

Only one item that was disclosed in 100% of the sample banks which is the brief definition and features of operational risk. While 6 items (key procedures, responsibility & policies, functions of audit & risk committee, reconciliation & monitoring of transactions, periodic assessment & risk identification, and compliance to Basel II or III) were disclosed in more than 90% of the sample banks. Four items (appropriate segregation & independence, requirements for reporting operational losses & proposed remedial action, risk mitigation insuring cost effectiveness, and quantitative analysis & measurement of operational risk) were disclosed in more 80% of the sample. Compliance with regulatory and other legal requirements were disclosed in 76% of the banks, while training & professional development and the ethical business standards were disclosed in almost 60% of the banks. Finally, documentation of control & procedures and the contingency and continuity plans were only disclosed in 50% of the sample banks.

The analysis reviled that 78% of the sample banks use the basic indicator approach for the calculating the operational risk, while 7% has used the standardized approach and 15 % of the sample banks have not disclosed any information regarding the measurement approach. Moreover, only one bank has not disclosed any information regarding its compliance with Basel II or III but on the other hand 8% of the banks disclosed their compliance to Basel III and the majority of the banks (84%) provided that they comply with Basel II. However, 20% of the banks that disclosed their compliance to Basel II have mentioned that they are currently planning and preparing to change their compliance to be according to Basel III.

Other relevant further information that were obtained from the analysis, is that we have noticed that 91% of the banks has disclosed information about Sharia compliance committee/ board while only 20% have included Sharia non compliance risk to operational risk. On the other hand 67% has included legal risk however only 13% has included the reputational risk under the operational risk. One interesting observation was that 27 % of the sample banks has a separate operation risk committee.

8 Conclusion

In this paper we reviewed the risk management in Islamic bank going through various literature review and we focused on the operational risk disclosure since we noticed that the regulations are mainly covering the market and credit risk. Islamic banks are exposed to unique risks as their operations depends on complex Islamic contracts and sharia principles. As a result the dimension of operational risk exposure is considered relatively higher than credit risk and market risk for Islamic banks as well as it is more sophisticated than in the conventional banks. Disclosure of operational risk is particularly important for banks in the light of the huge losses incurred by a number of financial institutions as a result of the failure operational risk management enabling investors and parties to assess risks and returns of their investments.

We found very few studies that have been conducted on risk management disclosure and thus we tried to study and develop a disclosure index for the operational risk using the content analysis applying it to the full annual report of Islamic banks. This disclosure index checklist included 16 items that are covering the qualitative and quantitative items of operational risk. We measured the quality of the operational risk disclosure by country and by bank using the developed index applied to all Islamic banks worldwide limiting it to banks using IFRS in the annual report of 2014 that composed our sample of 55 banks. We expected to find out special disclosure for operational risk in Islamic banks due to its unique characteristics but the empirical investigation that we applied did not reveal any significant difference and we consider this a serious problem. The empirical result of this research shows the operational risk disclosure in Islamic banks is not connected with Islamic finance, for instance only 20% of the sample have included sharia non compliance risk. Basel regulating principles are effective for banking supervision however there is a concern about its applicability to Islamic banks and this show the urge for standardized regulations that are adapted to the particular nature of Islamic banks where they can link operational risk management methods and operational risk types of each Islamic contract.

References

Abdullah, M., Shahimi, S., Ismail, A.G. (2011), *Operational in Islamic banks: Issues and management*. Qual. Res. Financ. Mark. 3, 131–151.

Ahmed, H., Khan, T. (2007), *Risk management in Islamic banking*. Handb. Islam. Bank. 144.

Akkizidis, I.S., Khandelwal, S.K. (2008), *Financial risk management for Islamic banking and finance*. Palgrave Macmillan New York, NY.

al-Bashir, M., al-Amine, M.(2008), *Risk Management in Islamic Finance: An Analysis of Derivatives Instruments in Commodity Markets*, Leiden and Boston: Brill 2008, 338 p. Yearb. Islam. Middle East. Law Online 15, 369–371.

Bessis, J., O'Kelly, B. (2015), *Risk management in banking*. John Wiley & Sons.

Biancone, P.P., Radwan, M.(2015), *Sharia Compliant "Possibility for Italian SMEs."* Eur. J. Islam. Finance.

Biancone, P.P., Shakhatreh, M.Z.(2015), *Using Islamic Finance for Infrastructure projects in non-Muslim Countries*. Eur. J. Islam. Finance.

Committee Basel.(2014), *Operational risk - Revisions to the simpler approaches* - consultative document.

Committee, B., others. (2011), *Principles for the Sound Management of Operational Risk. Basel*, Switzerland: Bank for International Settlements Communications.

Crouhy, M., Galai, D., Mark, R. (2001), *Prototype risk rating system*. J. Bank. Finance 25, 47–95.

Dar, H., Azmi, T.A.(2012), *Global Islamic Finance Report GIFR.* London, United Kingdom: Rexiter.

Febianto, I.(2009), *Risk Management In Mudharabah And Musharakah Financing Of Islamic Banks*. Available SSRN 1672180.

Gallati, R. (2003), *Risk Management and Capital Adequacy*. McGraw Hill Professional.

Hassan, H., KPMG's Egypt .(2009), *Basel II: Let's get operational risk*.

Hassan, K., Lewis, M. (2009), *Handbook of Islamic banking*. Edward Elgar Publishing.

Helbok, G., Wagner, C.(2006), *Determinants of operational risk reporting in the banking industry*. Available SSRN 425720.

IFSB. (2013), *Revised capital adequacy standard for institutions offering Islamic financial services* (No. IFSB-15).

IFSB.(2007), *Disclosures to promote transparency and market discipline for institutions offering Islamic financial services* (No. IFSB-4).

IFSB. (2005), *Guiding Principles of Risk Management.*

Izhar, H. (2010), *Identifying operational risk exposures in Islamic banking*. Kyoto Bull. Islam. Area Stud. 3, 17–53.

Kallman, J.W., Maric, R.V. (2004), *A refined risk management paradigm. Risk Manage*. 57–68.

Khan, T., Ahmed, H.(2001), *Risk Management: An Analysis of Issues in Islamic Financial Industry (Occasional Papers)*. The Islamic Research and Teaching Institute (IRTI).

KPMG LLP.(2014), *Regulatory Practice Letter* #RPL 14-18 | KPMG | US [WWW Document]. URL (accessed 2.24.16).

Makiyan, S.N. (2008), *Risk management and challenges in Islamic Banks.* J. Islam. Econ. Bank. Finance 4, 45–54.

Matz, L., Neu, P.(2006),*Liquidity risk measurement and management: a practitioner's guide to global best practices.* John Wiley & Sons.

Minhas, I.H.(2014), *Risk Management in Islamic Finance.* This Pap. Has Been Publ. Edbiz Consult. Based Lond. UK Its Latest Annu. Publ. Namely Glob. Islam. Finance Rep.

M. Linsley, P., J. Shrives, P. (2005), *Transparency and the disclosure of risk information in the banking sector*. J. Financ. Regul. Compliance 13, 205–214.

Napier, C. (2007), *Other cultures, other accountings?* Islamic accounting from past to present, in: 5th Accounting and History International Conference, Banff, Canada. pp. 9–11.

Raghavan, R.S. (2015), *Risk, the business driver in banks*. Notion Press.

Salem, R.A. (2013), *Risk management for Islamic banks.* Edinburgh University Press.

Sundararajan, V. (2007), *Risk measurement and disclosure in Islamic finance and the implications of profit sharing investment accounts. Islam*. Econ. FINANCE 121.

Van Greuning, H., Iqbal, Z. (2008), *Risk analysis for Islamic banks*. World Bank Publications.